

DOD Conference on Civilian Education and Professional Development

**Quality Initiatives for the 21st
Century: Continuing the
dialogue**

Assessing Curriculum via Critical Thinking
Roy Eichhorn - Army Management Staff College

8 August 2000

Critical Thinking

A Definition We Use

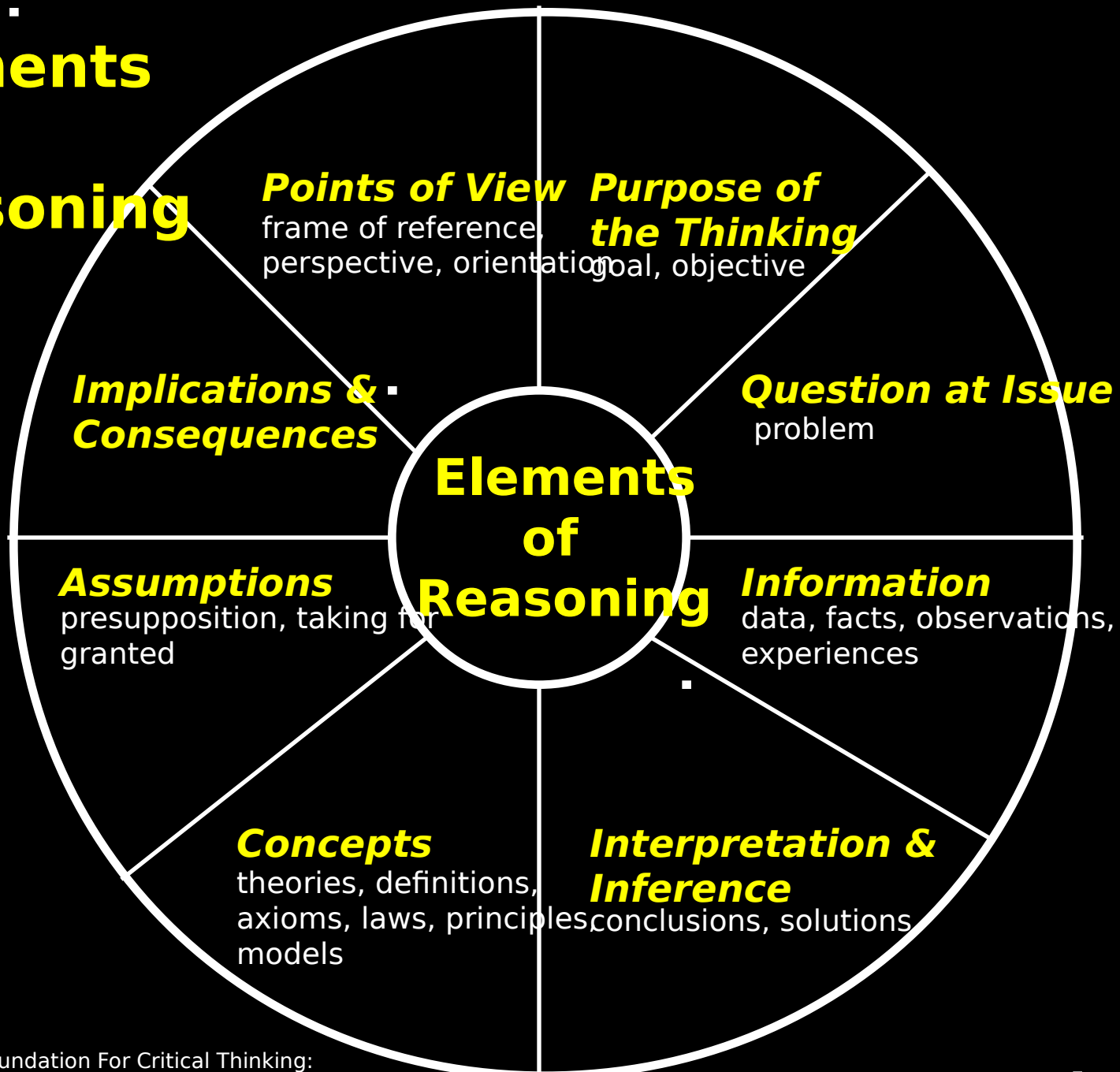
The Ability to think about one's thinking in such a way as:

- 1. to recognize its strengths and weaknesses and, as a result,**
- 2. to recast the thinking in improved form**

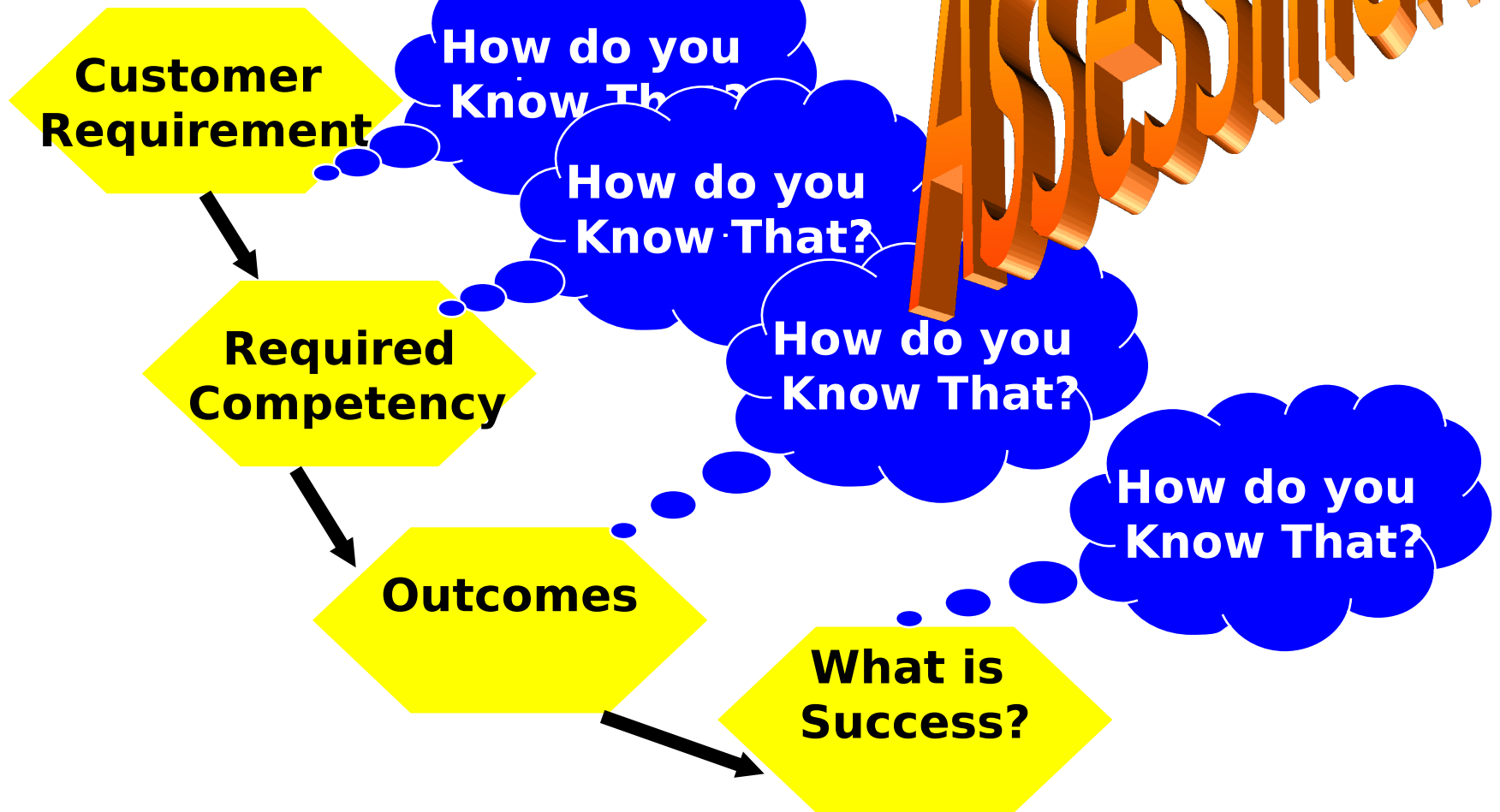
INTELLECTUAL STANDARDS FOR CRITICAL THINKING

- **CLARITY**
- **ACCURACY**
- **PRECISION**
- **DEPTH**
- **BREADTH**
- **RELEVANCE**
- **LOGIC**

Elements of Reasoning

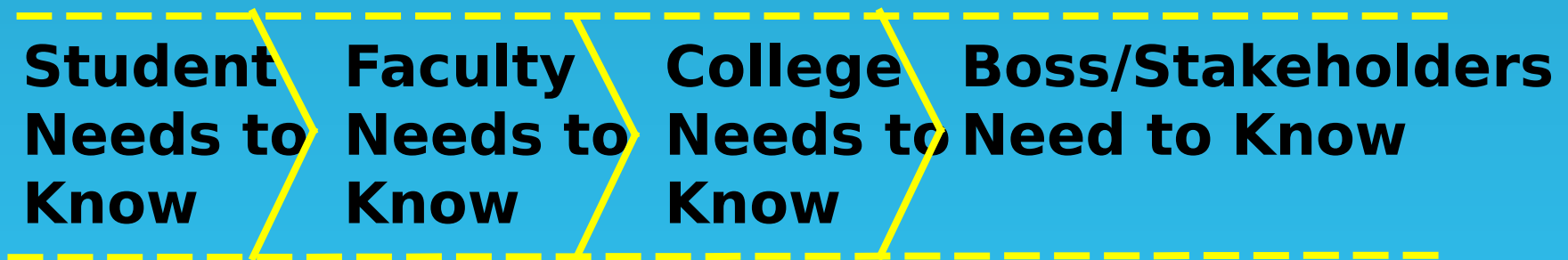


Assessment



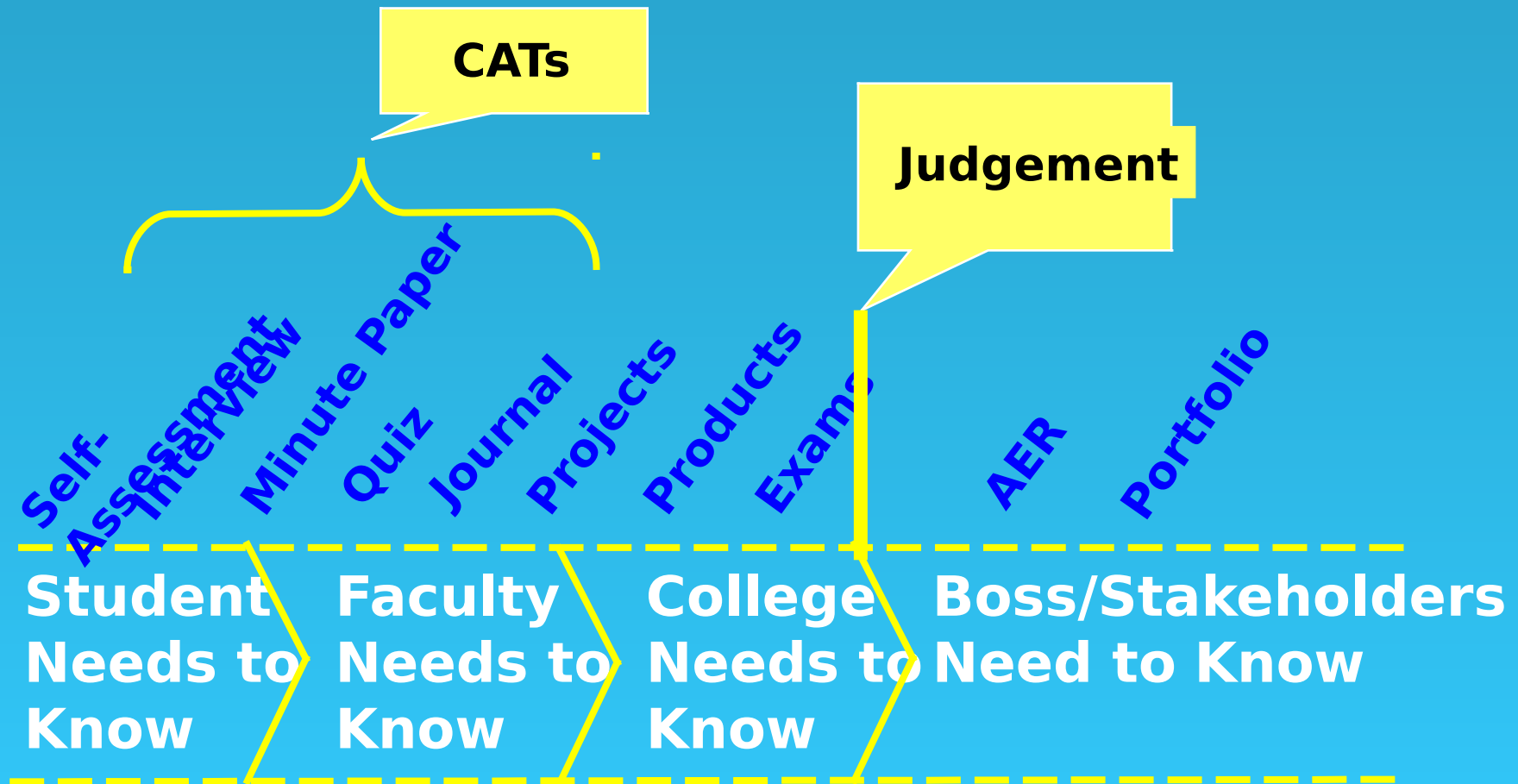
Assessment- Focus and Point of View

Student: Does He/She “Get it?”

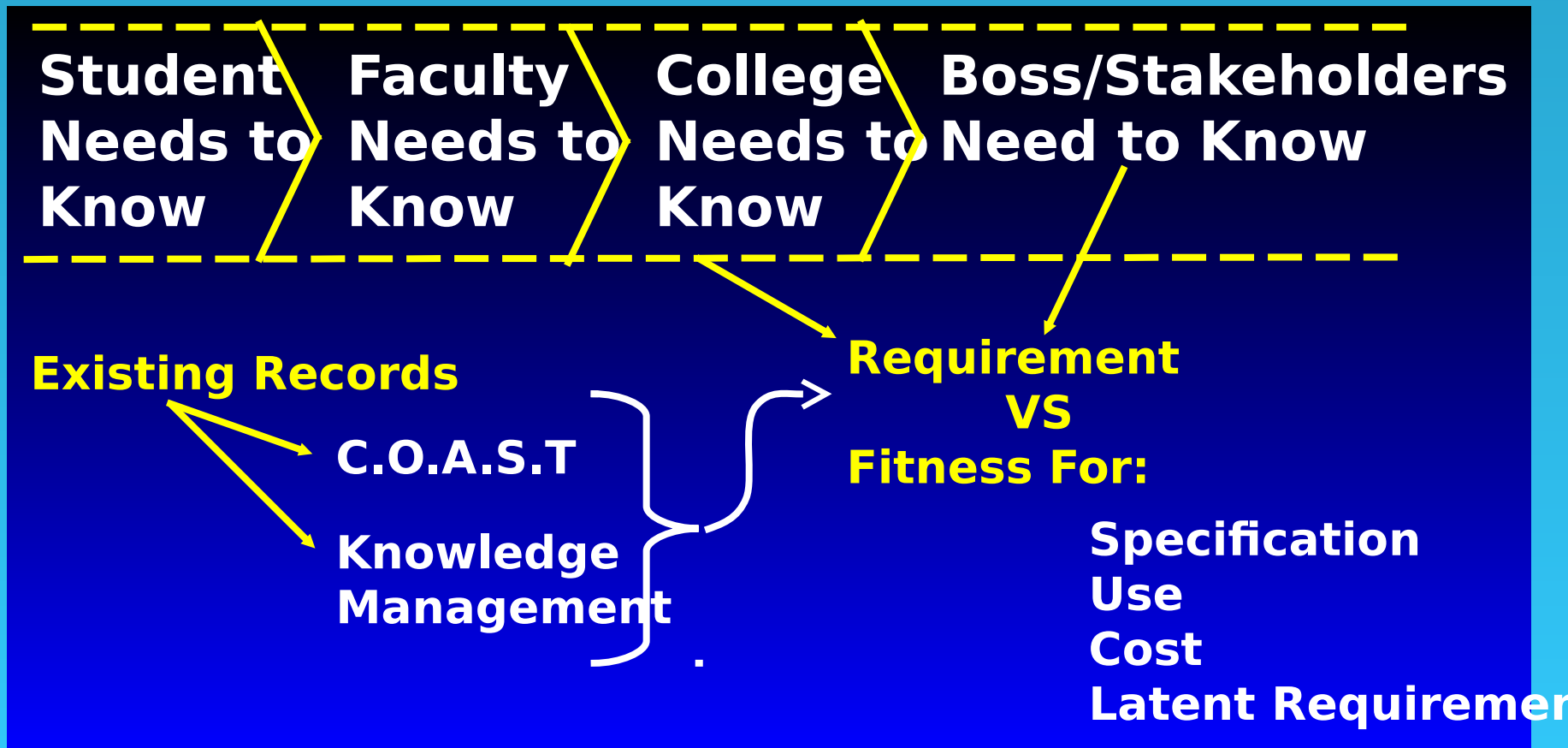


Program: Does it Work?

Does the Student “Get it?”



Does the Program Work



APPROACHES TO TEACHING THINKING



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graph TD; A[APPROACHES TO TEACHING THINKING] --> B[TEACHING OF THINKING]; A --> C[TEACHING FOR THINKING]; A --> D[INFUSION]; B --> E[Direct Instruction in thinking in non curricular contexts]; C --> F[Use of methods which promote thinking in curricular context]; D --> G[Restructuring content lessons for direct instruction in thinking];
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TEACHING OF THINKING

**Direct Instruction
in thinking in non
curricular contexts**

TEACHING FOR THINKING

**Use of methods
which promote
thinking in
curricular context**

INFUSION

**Restructuring
content lessons for
direct instruction
in thinking**

INFUSION integrates direct instruction in specific thinking skills into content area lessons. Lessons improve student thinking and enhance content learning.

APPROACHES TO TEACHING Competencies

**TEACHING OF
COMPETENCY**

**Direct Instruction
in competency in non
curricular contexts**

**TEACHING FOR
COMPETENCY**

**Use of methods which
promote competency in
curricular contexts**

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APPROACHES TO TEACHING Competencies

**TEACHING OF
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**Instruction in writing,
grammar, sentence
structure**

**TEACHING FOR
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APPROACHES TO TEACHING Competencies

**TEACHING OF
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**Instruction in writing,
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**TEACHING FOR
COMPETENCY**

**Instruction using
military terms and
situations as
the content**

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**Instruction using
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INFUSION

**Use authentic
situation that would
require a written
product**

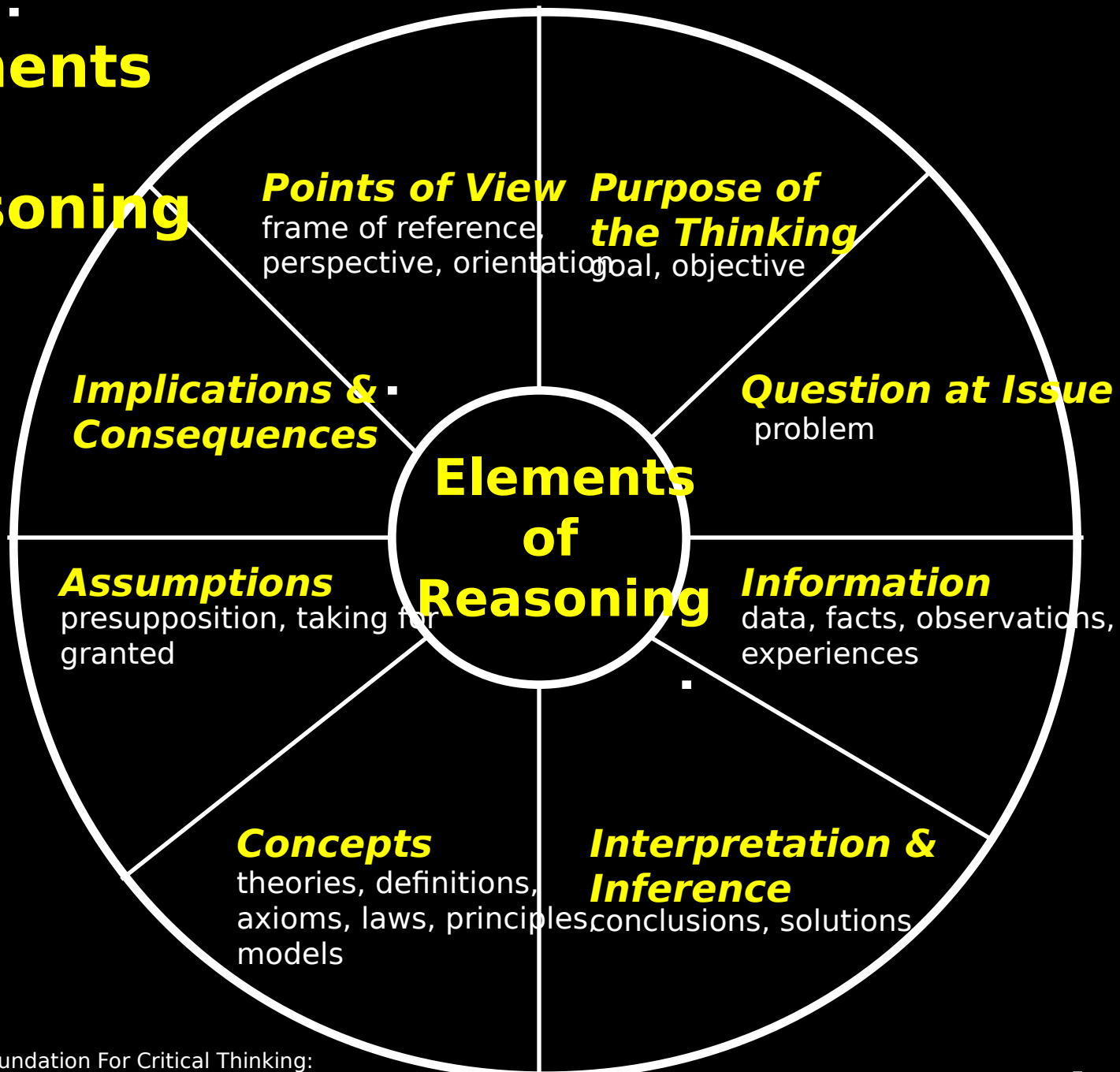
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DOMAINS OF THINKING DISCIPLINES IN EDUCATION



- **PSYCHOLOGICAL**
- **SOCIAL**
- **BIOLOGICAL**
- **RELIGIOUS**
- **ECONOMIC**
- **EDUCATIONAL**

Elements of Reasoning



Curriculum as a Function of the Developers

- Curriculum development and delivery is either a team sport or a performance art
- Assessment is a performance art
- Not everyone is Rembrandt

Perry/Garman's Model of Intellectual Development

Cognitive Complexity

Degree of Abstraction

Commitment

Constructed
Knowledge

Relativism

Multiplicity

Procedural
Knowledge

Subjective
Knowledge

Dualism

Received
Knowledge

Dualism

- ***There is a right answer to every question***
- ***All other answers are wrong***
- ***Right Answers are dispensed by authority***
- ***Authority “Knows”***

Implication: learners are dependent

Multiplicity

- ***Legitimate authorities disagree - more than one opinion can be “Right”***
- ***To have an opinion makes it “Right” since no absolute truth exists***
- ***No one is “wrong”***
Implication: no one has a right to criti

Relativism

- ***All knowledge depends on context***
- ***Responsibility & initiative for knowing and thinking are internalized***
- ***Obedience is rejected - meaning is constructed by oneself***
Implications: capacity for empathy, critical thinking now exist

Commitment

- ***Although the world is complex, I must still make commitments.***
- ***Principles and direction in life must come from within.***

Implication: New Behavior - makes commitments to people, careers, principles

Perry/Garmon's Model of Intellectual Development

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Techniques for Stimulating Thinking

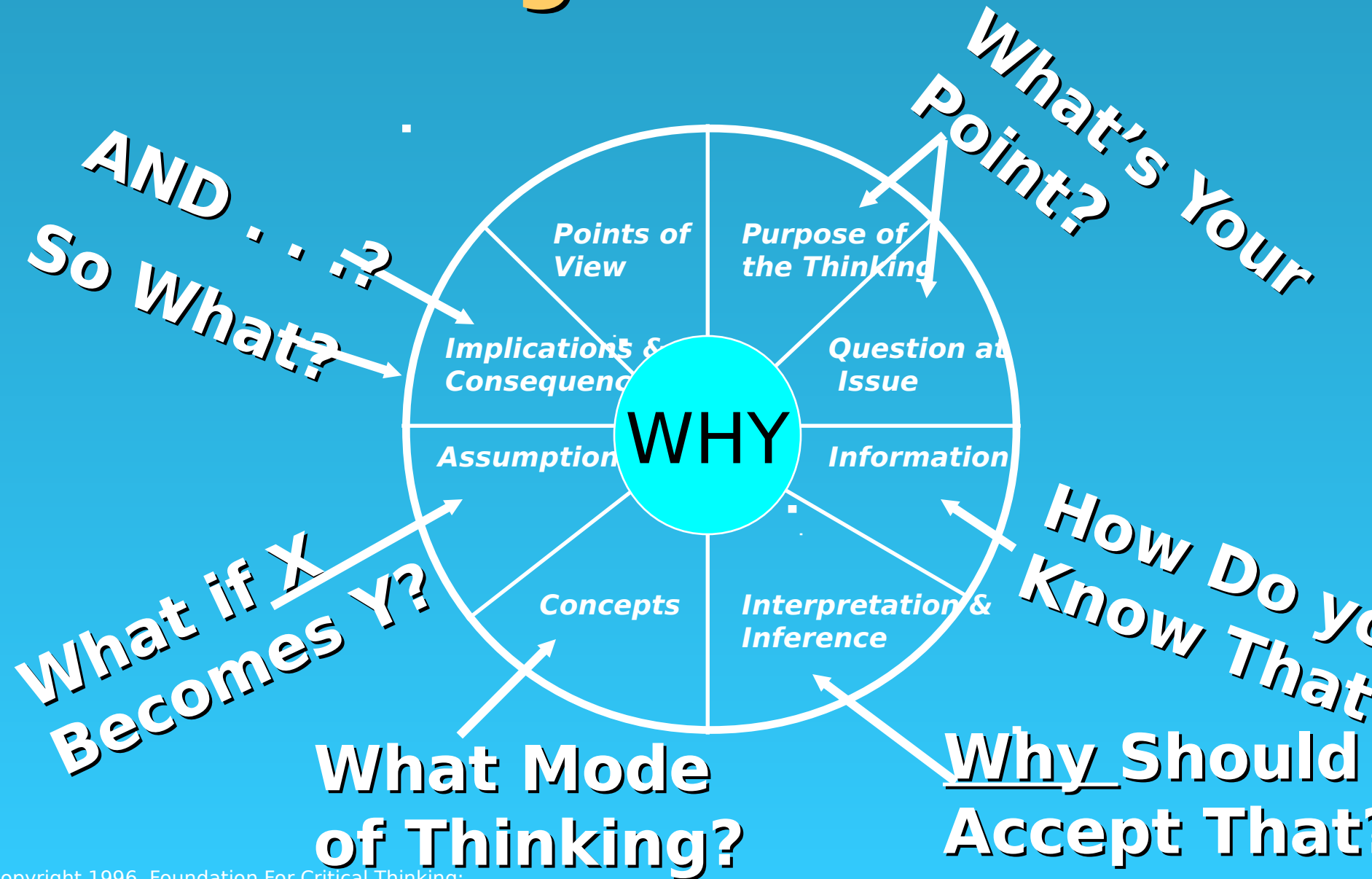
And the Answer is:

The Question!!

Some Useful Questions

- **“What’s Your Point?”**
- **“How do You Know That?”**
- **“Why Should I Accept That?”**
- **“Could You Explain it Another Way?”**
- **“So What?”**
- **“AND . . . ?”**
- **“What if X becomes Y?”**

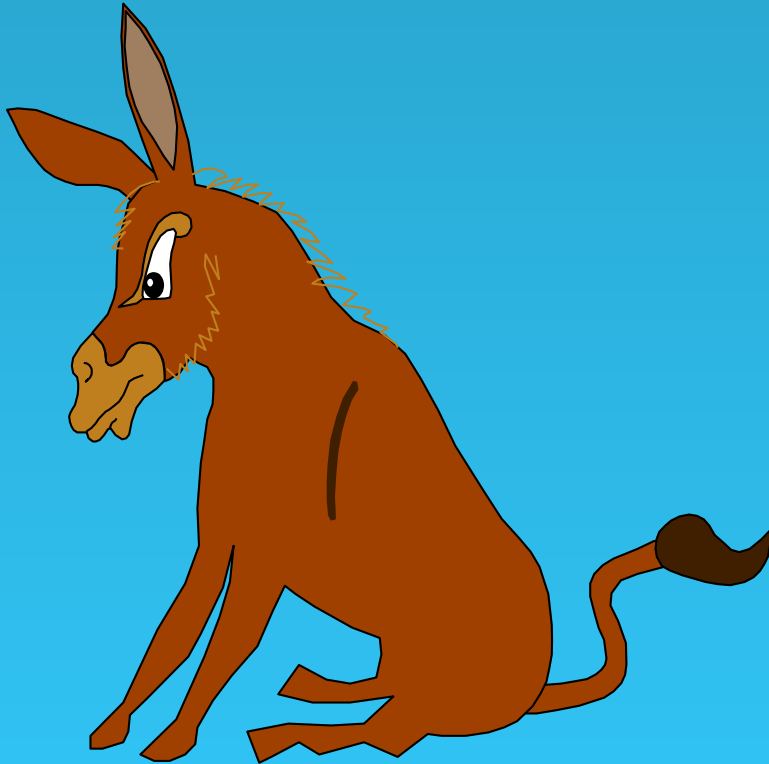
Target Areas



Tips/Thoughts

- Examine “Revealed Truth”
- Examine “Accepted Wisdom” (We all know that . . .)
- Question Sources - WHY is that source valid, why did you pick that particular source?
- How did you acquire your point of view ?

EGOCENTRISM



- **Defensiveness**
- **Irritability**
- **Arrogance**
- **Anger**
- **Apathy**
- **Indifference**
- **Alienation**
- **Resentment**

Thank You!!

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